

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-14 (Canceled).

Claim 15 (Currently Amended): An electrolytic reactor for use in a process for electrolytically coating a part, comprising:

a conical chamber open at two opposite ends;
a support for [[a]] the part to be coated, the support being placed in the chamber towards a wide end of the chamber;
an anode placed in the chamber[[,]] towards a wide and narrow end respectively of the chamber; and
means for circulating the electrolyte through the chamber from the narrow end to the wide end,
wherein the chamber includes stacked and removable slices and an armature for supporting and clamping the slices.

Claim 16 (Currently Amended): An electrolytic reactor according to claim [[14]] 15, wherein at least one of the slices contains at least a cavity in which the support can be placed.

Claim 17 (Previously Presented): An electrolytic reactor according to claim 15, wherein a taper angle of the conical chamber is less than 20° and uniform.

Claim 18 (Previously Presented): An electrolytic reactor according to claim 17, wherein circulating of the electrolyte is coaxial with the conical chamber within a tank containing the chamber, and comprising an electrolyte circuit looping back into the tank.

Claim 19 (Previously Presented): An electrolytic reactor according to claim 18, wherein the electrolyte circuit is connected to the narrow end of the chamber through a nozzle with a conical opening prolonging the chamber.

Claim 20 (Previously Presented): An electrolytic reactor according to claim 15, wherein the support of the part to be coated comprises electrical contacts for cathode polarization of the part arranged around the support and that include a free end pressed in contact on the part, and a connection end extending on a support face opposite the part.

Claim 21 (Previously Presented): An electrolytic reactor according to claim 20, wherein the connection ends of the electrical contacts are connected to flexible arms of a star connector, fixed to the support by a mechanism with variable spacing, and wherein the support includes stops on which the flexible arms bend, and the electrical contacts are in a form of curved hooks standing up on the flexible arms.

Claim 22 (Previously Presented): An electrolytic reactor according to claim 15, wherein the support of the part comprises a housing with a periphery and depth adjusted to the part.

Claim 23 (Previously Presented): An electrolytic reactor according to claim 15, wherein the support of the part is installed removably on an armature delimiting the conical chamber.

Claim 24 (Previously Presented): An electrolytic reactor according to claim 15, wherein the conical chamber, the support of the part to be coated, the part itself, and the anode are coaxial.

Claim 25 (Previously Presented): An electrolytic reactor according to claim 19, wherein the nozzle also includes stacked and removable slices.

Claim 26 (Previously Presented): An electrolytic reactor according to claim 15, wherein the slices are provided with individual extraction means.

Claim 27 (Previously Presented): An electrolytic reactor according to claim 26, further comprising slides free to move in grooves of sidewalls of the tank and recessed above a slice to be extracted.

Claim 28 (Previously Presented): An electrolytic reactor according to claim 16, wherein the slice comprises at least three radiating anode support arm cavities.

Claim 29 (New): An electrolytic reactor for use in a process for electrolytically coating a part, comprising:

a conical chamber open at two opposite ends;
a support for the part to be coated, the support being placed in the chamber toward a wide end of the chamber;
an anode placed in the chamber towards a narrow end of the chamber; and
means for circulating the electrolyte through the chamber from the narrow end to the wide end,

wherein the chamber includes stacked and removable slices and an armature for supporting and clamping the slices,

the conical chamber, the support of the part to be coated, the part and the anode are coaxial, wherein

the support of the part includes a central substrate for receiving the part and radial arms extending between one of the slices and the central support, and wherein

the conical chamber, the support of the part to be coated, the part itself, and the anode are coaxial, the support of the part including a central substrate to receive said part and radial arms extending between one of the slices of the central support.

Claim 30 (New): An electrolytic reactor according to claim 29, wherein at least one of the slices contains at least a cavity in which the support can be placed.

Claim 31 (New): An electrolytic reactor according to claim 29, wherein a taper angle of the conical chamber is less than 20° and uniform.

Claim 32 (New): An electrolytic reactor according to claim 31, wherein circulating of the electrolyte is coaxial with the conical chamber within a tank containing the chamber, and comprising an electrolyte circuit looping back into the tank.

Claim 33 (New): An electrolytic reactor according to claim 32, wherein the electrolyte circuit is connected to the narrow end of the chamber through a nozzle with a conical opening prolonging the chamber.

Claim 34 (New): An electrolytic reactor according to claim 29, wherein the support of the part to be coated comprises electrical contacts for cathode polarization of the part arranged around the support and that include a free end pressed in contact on the part, and a connection end extending on a support face opposite the part.

Claim 35 (New): An electrolytic reactor according to claim 34, wherein the connection ends of the electrical contacts are connected to flexible arms of a star connector, fixed to the support by a mechanism with variable spacing, and wherein the support includes stops on which the flexible arms bend, and the electrical contacts are in a form of curved hooks standing up on the flexible arms.

Claim 36 (New): An electrolytic reactor according to claim 29, wherein the support of the part comprises a housing with a periphery and depth adjusted to the part.

Claim 37 (New): An electrolytic reactor according to claim 29, wherein the support of the part is installed removably on an armature delimiting the conical chamber.

Claim 38 (New): An electrolytic reactor according to claim 33, wherein the nozzle also includes stacked and removable slices.

Claim 39 (New): An electrolytic reactor according to claim 29, wherein the slices are provided with individual extraction means.

Claim 40 (New): An electrolytic reactor according to claim 39, further comprising
slides free to move in grooves of sidewalls of the tank and recessed above a slice to be
extracted.

Claim 41 (New): An electrolytic reactor according to Claim 30, wherein the slice
includes at least three radiating anode support arm cavities.